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CLIMATE HAS NO BORDERS



COP26



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Kochpukur: A Prospective Archaeological Site from East Kolkata Wetland Area

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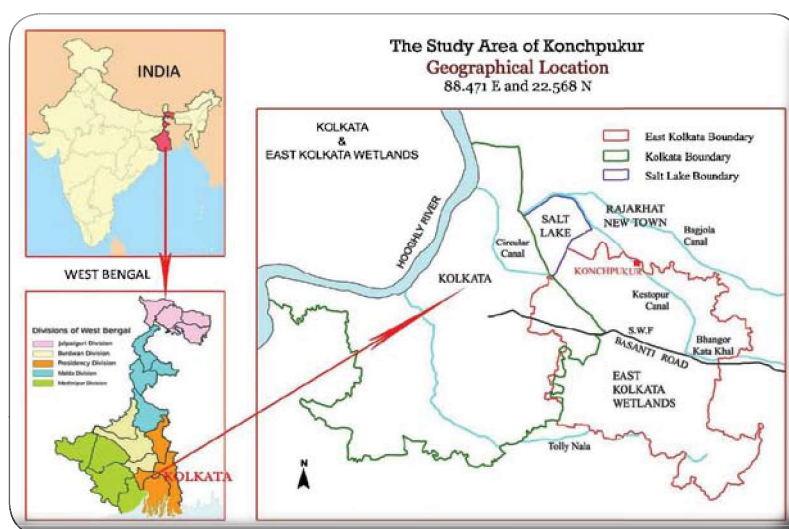
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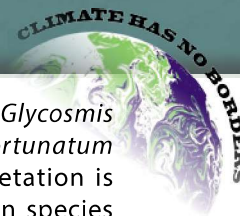
Introduction

This paper addresses a very crucial issue of understanding archaeological site in the suburban Kolkata. The main area of investigation is located beside East Kolkata Wetland (EKW), an important Ramsar Site of West Bengal. It is a stretch, wetland which stretches spread over 125 sq. km along the Eastern side of Kolkata City. This wetland is home to a variety of faunal and floral species. However, till recently the early history of this wetland was virtually unknown. During a recent field visit in this region, the authors came across an archaeological mound providing, for

the first time, archaeological evidences for early human habitation in this zone in the timescale of c. 2000 yrs BP. At present, although the age is based largely on the typology of artefacts found at the site, detailed investigation is desideratum. The site in question is Kochpukur, under the Bamanghata gram panchayat (Bhangar II block), South Twenty Four parganas. This is a large village of about 89.37 Ha. The village has 450 houses and 2500 individuals. The majority of the people in the village are farmers or fishermen. The village is adjacent to the Rajarhat, a well-planned satellite township of Kolkata (Map 1).



Map 1:
The Location of
the site.



Geological background

The site of Kochpukur is located in the delta plain of the recent to sub-recent geological time scale and is composed of poorly drained fine loamy soils associated with upper delta plain with clayey surface and subject to severe flooding. Kochpukur is located in the extreme South-East corner of the map classified as 'older tidal plain'. In the earlier CSMEi map the geomorphology is marked interpreted as 'coastal valley margin fan'. More sophisticated classification has led to a farther interpretation of this region as 'oldest Tidal plain' and also 'wetland' located in the lower delta plain. Considering these factors, it is possible to suggest that the site of Kochpukur is the first substantial archaeological site located in the oldest deltaic plain and more specifically in East Kolkata Wetland. Therefore, the importance of the site in the context of the deltaic archaeology and early historic study of Bengal cannot be over emphasized.

Drainage

The major drainage near the site is Bidyadhari river. According to the local people, in the past the site was located on the bank of this river, which has now shifted. Other than Bidyadhari, there is pond called kochpukur, from which the village gets its name.

Present day Environment

East Kolkata Wetland (EKW) was declared as Ramsar site (Internationally important wetland) in 2002 due to its wise use in terms of converting the city waste of Kolkata to fishery and agricultural resources through traditional practices. Kochpukur area is situated in the northeastern side of EKW. The prospecting site is nearly 1.04 acre area covered with dense vegetation. Major trees dominating the mound area are *Ficus infectoria*, *F. religiosa*, *Streblus asper*, *Anona squamosa*, *Anona squamosa*, *Azadirachta indica*, *Artocarpus lacucha* etc. Local people use Medicinal

plants like *Achyranthes aspera*, *Glycosmis pentaphylla*, *Clerodendrum infortunatum* etc from this site. Ground vegetation is dominated by the invasive alien species *Chromolaena odorata*. Among the faunal diversity several types of birds, butterflies, dragonflies, reptiles were observed.

Archaeological background

The archaeological background of the site can be related to the archaeology of the Twenty four parganas (North & South), which forms the administrative boundaries of region discussed. The region has been explored by several scholars, which has brought to light several archaeological sites from the early historic period to the medieval and late medieval period iii. The most important site from the region is Chandraketugarh, which has been excavated by the Asutosh museum of artiv The chronology of Chandraketugarh is from 4th century BCE to 4th century CE and it was a large urban center of about 2 sq km in extent, and possibly fortified. The finds from Chandraketugarh reveals the wealth of people of deltaic West Bengal during the early historic period. One of the major economic pursuits of the people in the delta was international trade. A Greek text written in the first century CE testifies that items of trade from the ports of Bengal were Malabathron (*Tezpatra*), spikenard and cotton and silk garments, which were traded to the Mediterranean region from the port of *Gangev*, which is identified with the archaeological site of Chandraketugarh. The other sites which were excavated are Atghara, Tilpi and Dhosa, Kankandighi, Deulpota and Harinarayanpur near diamond harbour. Other than these sites, materials belonging to the early historic period and early medieval have been found at several places on several islands of the Sundarban region. The sites are associated with extant fluvial system, mapped as extinct proto-padma meander belts and older distributaries of the Bhagirathi river. However, only few sites have been found in

the old tidal plain. The only excavated site in this region was Dumdum mound, which proved the existence of an early historic site within the precinct of the Calcutta municipality. The sites in this geomorphic unit provides crucial connection between Chandraketugarh in the moribund delta and the sites located farther to the South within the present mangrove marsh. The site of Kochpukur, is therefore only the second early historic site which can be said to be existing in the valley margin fan of the delta flank.

The site of Kochpukur

The site measures about 1 acre and is about 4 m high. The most important modern cultural feature existing at this particular site is a *Majhar* or a shrine, which belongs to a Muslim saint (*pirbaba*) although people from all faith can visit such shrines. In the local history, there is an interesting story concerning this particular shrine and the *Pirbaba*. In the past the site was located on the banks of navigable Vidyadhari river and was used by merchants. The *Pirbaba* who stayed at the site watched one day seven vessels of this merchant sailing and a red starling bird perched atop the last vessel. The *Pirbaba* requested the merchant to give him the bird. The merchant refused and as a result, the *Pirbaba* drowned the ships in the river. The merchant then pleaded with the *pirbaba* to return his ship and heading his prayers the *Pirbaba* exhumed those six ships from the river-bed. The bird however, was dead, the *Pirbaba* then took the dead body of the bird and a *Majhar* was constructed on top of it. This *Majhar* exists till date and can be seen on top of the mound, known as *Baba Madar Shaheber Kabarsthan*.

The land now belongs to Diwan family of the village of Kochpukur, whose ancestors originally belonged to Murshidabad and had cleared the land from forests after the *Pirbaba* appeared in their dreams and instructed them to do so. The site is within a grove of medicinal plants used by members of the Diwan family

in the past to practice traditional medicinal practices^{vi}. At present the site is used as a graveyard of the Muslim community of the village of Kochpukur.

According to the local history researchers '*Baba Madar Saheber Kabarsthan*' of Konchpukur village is an important historical site. Their assumption is based on its proximity with the three well known archeological places viz., Chandraketugarh of Deganga Block, Balanda of Haroa Block, Dum Dum House (Clive House) of South Dum Dum Municipality under the jurisdiction of North 24 Parganas district of West Bengal, India. All these are interlinked through navigable river *Bidyadhari* flowing from North to South 24 Parganas.

Chandraketugarh is described as the site "...securingly represents the market town of Ganga of the Periplus (1st cent AD) and Gangaridae of Ptolemy (2nd cent AD)." Balanda is compared with famous Nalanda at Bihar. Dum Dum House was excavated by Archaeological Survey of India (ASI) in the early first decade of 21st century after prolonged persistent of local historians under the initiative of Deshkal. ASI discovered huge archaeological objects and expected to get more from there. Similarities of the said four mound-shaped sites are situated nearer to the bank of river Bidyadhari. The researchers feel that riverine civilization could be traced at '*Baba Madar Saheber Kabarsthan*' of Konchpukur if proper scientific investigation to be done.



Plate 1: The high mound of Kochpukur showing pottery in the foreground.



Plate 2 : Close up of the mound surface showing scattered pottery.

Description of artefacts collected from the mound

The artefacts collected from the surface of the mound includes pottery and building materials. Following is a description of major pottery.



Plate 3: Coarse Grey ware with paddle marks

Greyware: The collected grey ware from the site is both in fine and coarse fabric. The coarse fabric of the grey ware is prepared from mill-levigated clay and consisted of fine sand and mica. The core of the sherd is of greyish red to reddish grey on colour, and the thickness of the visible section is between 5.8-4.4 mm. The most distinctive feature of

the coarse grey ware are the parallel grooves and paddle marks on the body. The shapes of these types are few and one shape, which could be documented is a bowl with everted rim and a vase with the preserved rim with roundish cross-section. The precise dating of this ware is a problem how paddle marks. The fine grey ware: In contrast to the coarse grey ware, the fine grey ware is made of well-levigated clay with a uniform grey core. The body paste is also fine and where sand like feeling is absent. The surface of the pottery was treated with a grey or black wash. The fine grey ware did not show any decoration or forming mark on the body such as paddle marks or grooves.

The fine grey ware can be dated tentatively to the early historic period as similar fabric is known from the well-dated early historic levels at sites like Chandraketugarh and Tamluk. The common shape of this variety is the dish with convex sides and flat base. The thickness of the extant section was 7.2 mm. Another shape was Vase with everted rim & triangular cross section with a groove on top of rim. One sherd is noticed with a brownish slip.



Plate 4: Sherds of Fine Grey ware

Chocolate and black ware: This is another coarse fabric from the site. The surface of the pottery feels much like the coarse grey ware but the core of this ware is dirty red, indicating oxidizing condition of firing as opposed to the reduced firing of the grey ware. The shapes of this ware is not ascertained and the cannot be precisely dated.

Bicolour ware: Bicolour pottery in coarse

fabric with red out side and grey inside has also been found. This ware is coarse and sandy in fabric with mica visible on the surface. The section is 4.4 mm in thickness and grey in colour indicating reduced firing. The sherd was treated with an external slip or wash. The shape could not be ascertained.

Bicolour ware (b): This ware can also be called the Black and Red ware. It is very coarse and with a thick section of 9 mm. The core is dirty red indicating quick firing inside a kiln. The body has groove marks 1.4 mm and was treated with a wash on the outside and also on the inside. The shape could not be ascertained.

Red ware: The red ware is commonest type of pottery, which has been found from the surface of the site. The red ware can again be divided into coarse and fine ware. The coarse ware was made of very ill levigated clay to ill-levigated clay because of which the very coarse variety of the ware has a gritty and sandy texture. Large flecks of mica are also visible on the surface.

The exterior surface treated with a slip. The average thickness of the very coarse and coarse varieties of the red ware is 6.5 mm, making it a rather sturdy ware category. Most of the sherds found on the surface are body sherds, designs on sherds are parallel grooves with 0.9 mm. However, one particular shape recorded in the variety of red ware is a vase with thickened rim, roundish in cross-section.



Plate 5 : Slanting design on the coarse red ware variety

The fine red ware found at the site was made of well-levigated clay and has a smooth surface. The fine red ware was treated with a slip on the outside. The average thickness of the section was 5 mm indicating the finer variety of the ware. The core of the red ware appears grey, indicating reducing environment of firing but the red colour could be achieved as a result of application of red haematite rich slip. The sherds were only body sherds. Desings consists of parallel grooves with 2.2 mm in length possibly made by paddle. One particular sherd shows an interesting 'net' design. Unfortunately, the shape could not be ascertained.



Plate 6 : Fine Red ware with 'net' desings.

Terracotta tiles: The building materials from the site are grooved tiles in red fabric. These tiles not only indicate habitation but also chronology of the site. The thickness of tiles from the site is 11.6 mm and this can be compared to excavated tiles from other well-dated sites.

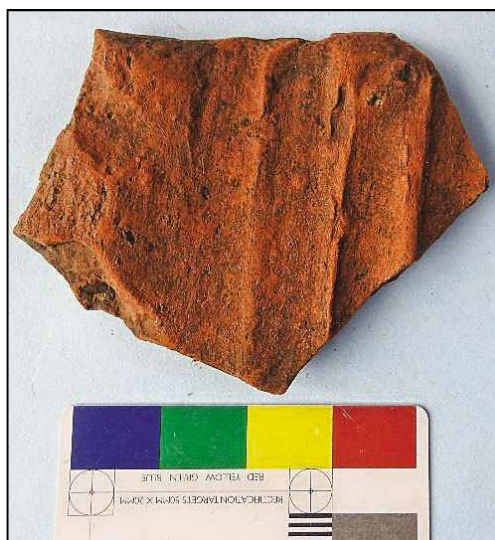


Plate 7: Terracotta tiles with double grooves of the early historical period.

Chronology.

The site can be placed in the early centuries of Christian era as evidenced from the artefact. Comparable artefacts are available from excavated sites in the coastal zone of West Bengal, including Chandraketugarh, Tamluk and Bahiri. The fine grey ware indicates and early dating of the site and some of the paddle impressed and decorated pottery may also go back to the early historic period. The most important indication is the presence of grooved tiles. The tiles do not go back beyond the 4th century CE and those tiles were also recovered from the base of the mound. Pottery typology and the height of the mound indicate the continuation of the settlement which must be ascertained in future.

Conclusions.

Evidences from the site of *Kochpukur* has provided new insights into the history

of human settlement in the deltaic region of West Bengal. The opinion of the earlier researchers that most early historic sites in the delta are buried can now be refuted and reinvestigated with the evidence from Kochpukur. The 4 m high mound of *Pirbaba* is an anthropogenic deposit. This is proved recorded from the tile pieces. The tiles were part of roofs of early historic structures, which possibly were placed atop wooden posts to construct the buildings. The early historic period could have been succeeded by early medieval and medieval period. The cultural sequence can be ascertained after small-scale stratigraphic excavations on the site.

References

- Centre for Studies in Man and Environment, a non-government organization produced maps relating to the quaternary geology of the Bengal basin. The authors acknowledge consultation of those maps, which provide a very detailed mapping of geomorphological features in the Bengal basin. For a detailed discussion on the mapping of sites like Chandraketugarh is provided in the article by Chakrabarty et al 2007. iiChakrabarti, C, B. Bhattacharya, P. Chakravarty, S.N. Banerjee, K. Gangopadhyay and G. Sengupta. 2007. Preliminary observations on the growth of early historic settlement of Chandraketugarh, West Bengal - A geomorphological approach, *Man and Environment* XXXII(2): 47-60.
- Chakrabarty Sharmi, "Archaeological Sites of Lower Deltaic Region of West Bengal and their Context: Some Preliminary Observations", Vol 8, 2017, 27-58.
- Indian Archaeology - A Review (IAR). 1954-55: 19; 1973 - 74: 32, 1956-57, 1957-58 : 1958-59, 1961-62, 1966-67.
- Casson, Lionel. *The Periplus Maris Erythraei*. Princeton: Princeton University Press, 1989.
- Pramanik Bhupesh Kumar. *Lavan Hrader Upakatha*, Kolkata, Deshkal, 2000. □